

**LINCOLN**  
**WELDERS**

# LINCOLN SHIELD-ARC

## GASOLINE ENGINE DC WELDERS



Welders the world over prefer Lincoln "Shield-Arc" welding machines because they know that these machines are rugged, dependable, and can be set to give exactly the right arc characteristics for their own personal technique.

**RUGGED** "Shield-Arc" gasoline engine driven welders have a sturdy, but lightweight base that withstands the unavoidable abuse received under adverse field conditions. Canopies and self-latching doors protect all Lincoln machines from the weather, and a grill and metal framing prevent radiator damage. "Shield-Arc" welders will "take it" on the roughest jobs.

**DEPENDABLE** and time-tested Continental and Hercules engines power Lincoln welders. These engines, used on many types of heavy construction equipment, are selected to have plenty of reserve power for best performance and longest life. Operating at relatively slow speeds, they run day after day with just routine maintenance.

**ARC CHARACTERISTICS** suited to the individual techniques of each operator are easily obtained with Lincoln's "Dual Continuous Control". These stepless controls provide gradual changes of both voltage and current . . . not just a few selected positions. Gives operator perfect control of the arc.

**NEMA RATED**, these welders far exceed specifications. Aside from periodically checking brushes, these generators literally run for years without maintenance. "Shield-Arc" welders are sensitive to operator needs yet have plenty of stamina.

**LOW OPERATING COST** is an important added feature of "Shield-Arc" welders. Each machine is equipped with the new R-57 idling device. This device drops engine speed to low idle when not actually welding and automatically picks it up to operating speed when the arc is struck. It waits a few seconds after the arc is broken before it reduces engine speed. Normally this is enough time for the operator to change electrodes while the engine holds at operating speed.

**AUXILIARY POWER** to run lights or universal power tools is standard on all "Shield-Arc" welders. One kilowatt of 115V DC power is available at a receptacle on the control panel — an oversize generator with three kilowatts of 115V DC power is available on special order.

**STURDY UNDERCARRIAGES** are available for "Shield-Arc" welders. The K-753 is a four-wheeled undercarriage for all types of applications; the K-754 is a two-wheeled undercarriage especially for high speed road towing.

**ELECTRIC STARTERS** available as optional equipment, save time and effort. Either battery or magneto ignition systems may be installed on Lincoln welders having battery starters.

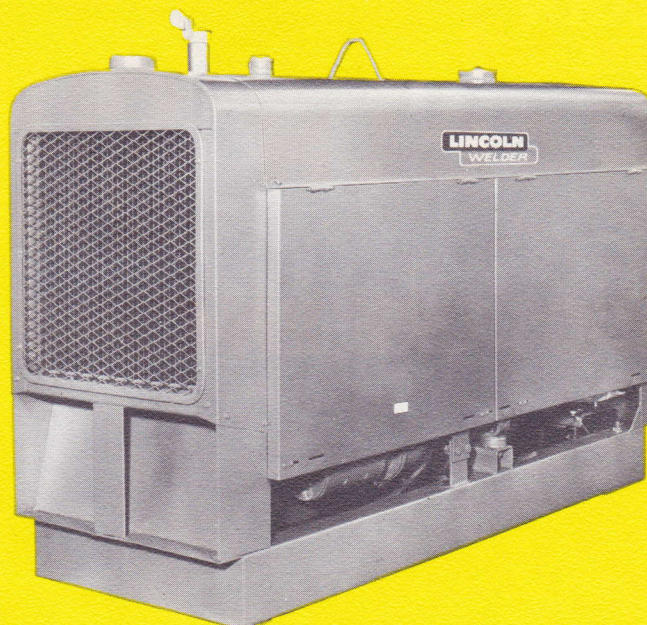


# SAE-300-F226

## Continental

### GASOLINE ENGINE WELDER

*with Dual Continuous Control*



#### ENGINE EQUIPMENT

**Engine** . . . new, powerful six cylinder Continental. It has many parts that are interchangeable with other Continental engines used on Lincoln Welders.

**Lubrication** . . . Continental gear type oil pump and Fram or Puralator expendable type oil filter insure delivery of clean oil under pressure to all main bearings, lower connecting rods, and camshaft bearings.

**Cooling** . . . maintained at high efficiency by Continental centrifugal, belt-driven water pump and large 7 psi pressure type radiator.

**Ignition System** . . . American-Bosch or Fairbanks Morse high tension magneto with impulse starter coupling for easy hand cranking or quick electric starting.

**Fuel System** . . . The lead plated, welded steel gasoline tank supplies gasoline by gravity through a sediment bowl to the Zenith carburetor. It is a heavy-duty industrial up-draft type with both main and idling jets.

**Governor** . . . Hoof or Pierce gear driven, fly ball type, constant speed centrifugal governor, maintains proper engine speed under all load conditions.

**Air Cleaner** . . . Oil bath type, Air-Maze filter keeps abrasive dust out of engine.

**Engine Idler** . . . Lincoln type R-57 delayed action AUTOMATIC idling device.

**Auxiliary Power** . . . 1 Kw of 115V DC power is available at a receptacle on the control panel.

#### OPTIONAL EQUIPMENT (at slight extra cost)

**EXTRA AUXILIARY POWER** . . . 3 Kw of 115V DC power for extra large lighting or power tool loads.

**UNDERCARRIAGES** . . . Both the K-753 four-wheeled and the K-754 two-wheeled undercarriages are suitable; order as separate equipment.

**ELECTRIC STARTER** . . . A battery powered starter with either battery ignition (SB) or magneto ignition (SM) system is available, factory installed (12 volt system).

**METER** . . . A volt-ammeter is available, factory installed.

#### SPECIFICATIONS

TYPE	K-1197
Current Rating (NEMA) at 40 volts	300 amps
Duty Cycle	60%
Current Range (amps)	60-450
Engine, Continental 6-cylinder	F-226
Bore and Stroke	3-5/16" x 4-3/8"
Piston Displacement, cu. in.	226
Horsepower at 1500 r.p.m.	50

#### Operating Speeds:

Full Load	1500 r.p.m.
High Idle	1600 r.p.m.
Low Idle	1000 r.p.m.

#### Capacity:

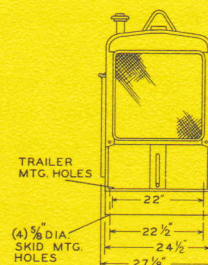
Oil (Quarts)	5
Water (Gallons)	3
Gasoline (Gallons)	22 1/2

#### Weight:

Net	1765 lbs.
Shipping Domestic	1893 lbs.
Shipping Export	2079 lbs.



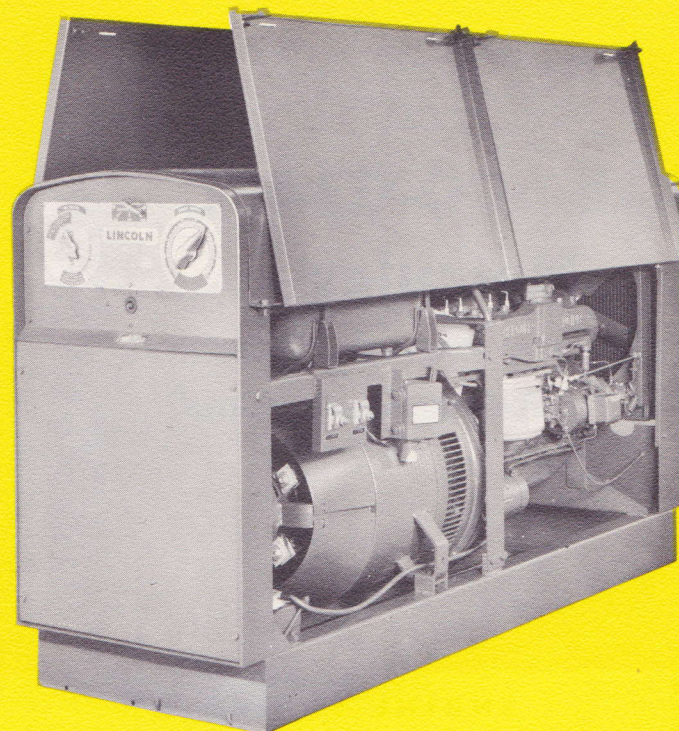
Dimensions of SAE-300 and S





# SAE-400-F244 Continental

**GASOLINE ENGINE WELDER**  
*with Dual Continuous Control*



## SPECIFICATIONS

TYPE ..... K-1198  
Current Rating (NEMA) at 40 volts.....400 amps  
Duty Cycle ..... 60 %  
Current Range (amps) ..... 80-600  
Engine, Continental 6-cylinder ..... F-244  
Bore and Stroke .....3-7/16" x 4-3/8"  
Piston Displacement, cu. in. .... 244  
Horsepower at 1700 r.p.m. .... 60

### Operating Speeds:

Full Load .....1700 r.p.m.  
High Idle .....1800 r.p.m.  
Low Idle .....1200 r.p.m.

### Capacity:

Oil (Quarts) ..... 5  
Water (Gallons) ..... 3 1/2  
Gasoline (Gallons) .....22 1/2

### Weight:

Net .....1785 lbs.  
Shipping Domestic .....1911 lbs.  
Shipping Export .....2097 lbs.

## ENGINE EQUIPMENT

**Engine** . . . powerful six cylinder Continental. It has many parts that are interchangeable with other Continental engines used on Lincoln Welders.

**Lubrication** . . . Continental gear type oil pump and Fram or Puralator expendable type oil filter insure delivery of clean oil under pressure to all main bearings, lower connecting rods, and camshaft bearings.

**Cooling** . . . Maintained at high efficiency by Continental centrifugal, gear-driven water pump and extra large 13 psi pressure radiator.

**Ignition System** . . . American-Bosch or Fairbanks Morse high tension magneto with impulse starter coupling for easy hand cranking or quick electric starting.

**Fuel System** . . . The lead plated, welded steel gasoline tank supplies gasoline by gravity through a sediment bowl to the Zenith carburetor. It is a heavy-duty industrial up-draft type with both main and idling jets.

**Governor** . . . Hoof or Pierce gear driven, fly ball type, constant speed centrifugal governor, maintains proper engine speed under all load conditions.

**Air Cleaner** . . . Oil bath type, Air Maze filter keeps abrasive dust out of engine.

**Engine Idler** . . . Lincoln type R-57 delayed action AUTOMATIC idling device.

**Auxiliary Power** . . . 1 Kw of 115V DC power is available at a receptacle on the control panel.

## OPTIONAL EQUIPMENT (at slight extra cost)

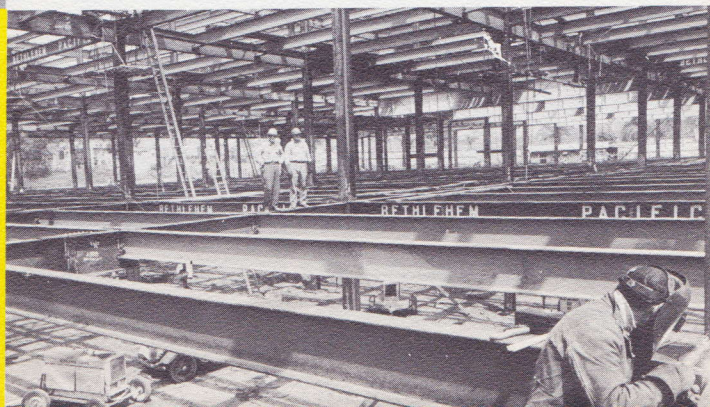
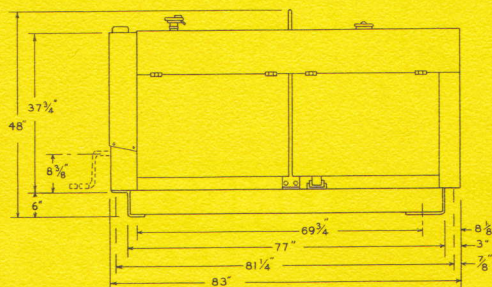
**EXTRA AUXILIARY POWER** . . . 3 Kw of 115V DC power for extra large lighting or power tool loads.

**UNDERCARRIAGES** . . . Both the K-753 four-wheeled and the K-754 two-wheeled undercarriages are suitable; order as separate equipment.

**ELECTRIC STARTER** . . . A battery powered starter with either battery ignition (SB) or magneto ignition (SM) system is available, factory installed (12 volt system).

**METER** . . . A volt-ammeter is available, factory installed.

AE-400 Gasoline Engine Welders

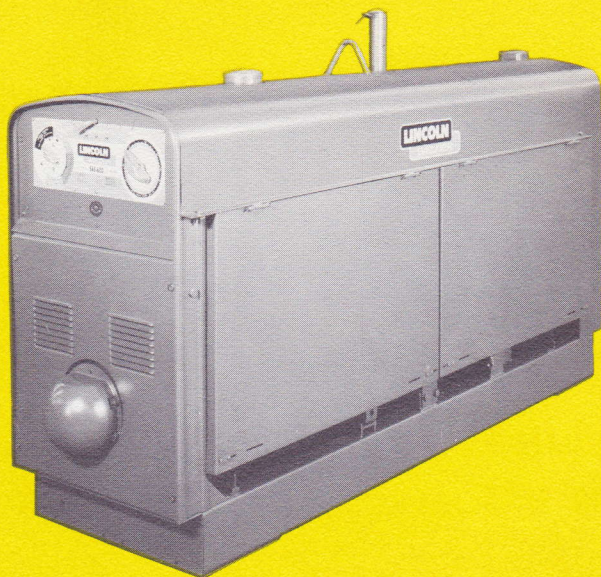




# SAE-600-G3400

## Hercules

**GASOLINE ENGINE WELDER**  
with Dual Continuous Control



### ENGINE EQUIPMENT

**Engine** . . . new Hercules six-cylinder gasoline engine.  
**Lubrication** . . . Hercules gear type oil pump and Fram replaceable cartridge oil filter insure delivery of clean oil under pressure to all main bearings, lower connecting rods, and camshaft bearings.

**Cooling** . . . Hercules centrifugal, gear-driven water pump, and extra large 7 psi pressure radiator.

**Ignition System** . . . American Bosch or Fairbanks Morse high tension magneto with impulse coupling.

**Fuel System** . . . The lead plated, welded steel gasoline tank supplies gasoline by gravity through a sediment bowl to the Marvel Schebler or Zenith carburetor. It is a heavy-duty industrial up-draft type with both main and idling jets.

**Governor** . . . Pierce gear driven, fly ball type, constant speed centrifugal governor, maintains proper engine speed under all load conditions.

**Air Cleaner** . . . Oil bath stack type, Air-Maze filter keeps abrasive dust out of engine.

**Engine Idler** . . . Lincoln type R-57 delayed action AUTOMATIC idling device.

**Electric Starter** . . . A battery-driven starter with magneto ignition system is included as standard equipment (12 volt system).

**Auxiliary Power** . . . 1 Kw of 115V DC power, plus all connections for automatic welders, are available at a receptacle on the control panel.

### OPTIONAL EQUIPMENT (at slight extra cost)

**EXTRA AUXILIARY POWER** . . . 3 Kw of 115V DC power for extra large lighting or power tool loads.

**UNDERCARRIAGE** . . . The K-753, four-wheeled is suitable; order as separate equipment.

**METER** . . . A volt-ammeter is available, factory installed.

### SPECIFICATIONS

TYPE .....K-1200-SM  
Current Rating (NEMA) at 40 volts.....600 amps  
Duty Cycle .....60%  
Current Range (amps) ..... 120-750  
Engine, Hercules 6-cylinder .....G3400  
Bore and Stroke .....4" x 4 1/2"  
Piston Displacement, cu. in. ....339  
Horsepower at 1400 r.p.m. ....82

#### Operating Speeds:

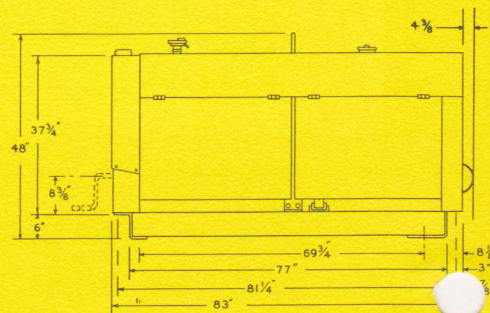
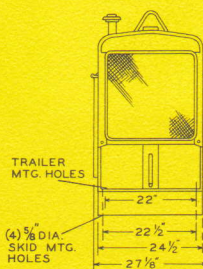
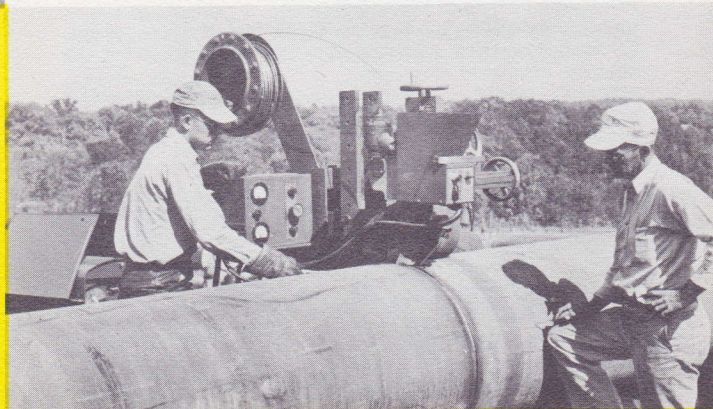
Full Load ..... 1400 r.p.m.  
High Idle ..... 1550 r.p.m.  
Low Idle ..... 1000 r.p.m.

#### Capacity:

Oil (Quarts) .....10  
Water (Gallons) ..... 5  
Gasoline (Gallons) .....22 1/2

#### Weight:

Net .....2430 lbs.  
Shipping Domestic .....2560 lbs.  
Shipping Export .....2772 lbs.



**THE LINCOLN ELECTRIC COMPANY**

*The World's Largest Manufacturer of Arc Welding Equipment and Electrodes*

CLEVELAND 17, OHIO

